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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,162	10/31/2000	Benjamin M. Cahill III	INTL-0438-US-(P9450)	9745

21906 7590 08/08/2003

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HOUSTON, TX 77024

EXAMINER

ABDULSELAM, ABBAS I

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 08/08/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/703,162

Applicant(s)

CAHILL, BENJAMIN M.

Examiner

Abbas I Abdulsalam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-7, 10-14, 16-17 and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Gloudermans et al. (USPN 6266100) in view of Cheung et al. (USPN 6538656).

Regarding claims 1, 10 and 17, Gloudermans teaches a flicker filter operation (760) including a filtered alpha which is expressed as a function of the unfiltered alpha. Gloudermans teaches a set of hardware which enables blending of graphic with video. Gloudermans teaches PC concentrator (82), computers (94, 96) which help create the graphic and a set of alpha signals and a keyer (98) which receives graphic and alpha signals as well as a monitor (102). Furthermore, Gloudermans teaches a multi viewer (90) configuration which receives the desired program. See col.32, lines 41-63, Fig 2, Fig 24, col 2, lines 53 and col. 7, lines 25-53. However, Gloudermans does not disclose adjusting a flicker filter based upon the alpha value. Cheung on

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the other hand teaches as shown in Fig. 28, a process of blending video and graphic surfaces, and further discloses that by using the alpha value, a graphic output is preblended in the graphics blender (step 904) and filtered in step (906) in order that the final blended result would be produced. Moreover, Cheung teaches a filtering block (98) for performing anti flutter filtering in conjunction with a video scaler (104) which includes a filter for performing upscaling and down scaling using four-tap and eight tap filters along with programmable coefficients. See Fig 4.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Gloudemans' video presentation to adapt Cheung's anti flutter filtering (98) and a video scaler (104) activities as represented in Fig. 4. One would have been motivated in view of the suggestion in Cheung that filtering along with video scaling provides the desired method of adjusting a flicker filter. The use filtering along with video scaling helps function video and graphic system as taught by Cheung.

Regarding claims 5-7 and 21, Gloudermans teaches a flicker filter operation (760) and the flicker filter operation is performed according to a defined equation. See col. 32, 41-54. It would have ben obvious that the equation can be manipulated for zero flicker filter which makes it equivalent to turning off the flicker filter.

Regarding claim 11, Gloudermans teaches the steps of drawing graphs and employing the flicker filter operations are performed by a computer. See col. 23, lines 20-23. See Fig 24.

Regarding claims 12, 14 and 16, Gloudermans teaches determination of alphas for each graphic pixel in the frame with respect to keyer (98) in conjunction with program video.

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Gloudermans also teaches pixel (820) which represents a pixel in the program video for which alpha is being calculated. See col. 33, lines 21-27 and col. 31, lines 1-17.

Regarding claim 13, Gloudermans teaches a scenario where the graphic is simply added to the video without considering the contents of video signals. See col. 9, lines 204 and Fig 3(152).

3. Claims 2-4, 8-9, 15, 18-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gloudermans et al. (6266100) in view of Cheung et al. (USPN 6538656) and Young et al. (USPN 6144365).

Gloudermans as modified is described above. However, Gloudermans-Cheung does not teach comparing the alpha value to a predetermined threshold value, subtracting the alpha value from a threshold value and performing division with respect to alpha value. Young on the other hand teaches the alpha test unit (306) which compares the alpha value of a pixel to a threshold and outputs the result to "Z compare unit" which in turn transfers its own output to alpha blending unit(310). See Fig. 3. Young further details the alpha bending unit (310) to include adder, subtractor, multiplier and divider (430, 422, 428 426) as shown See Fig. 4.

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to further modify Gloudermans' video presentation to adapt Young's alpha test unit (306) as configured in Fig. 3 and alpha blending unit (310) as detailed in Fig. 4. One

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would have been motivated in view of the suggestion in Young that the alpha test unit (306) along with Z compute unit (308) coupled with alpha blending unit (310) equivalently provide the desired comparison, subtraction and division of alpha value with respect to threshold value. The use of alpha test unit (306) and blending unit (310) helps a system of computer graphics and image processing as taught by Young.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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5. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abdulsalam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of patents and Trademarks

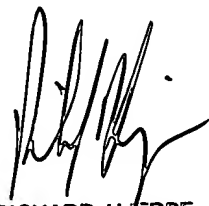
Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand delivered responses should be brought to crystal park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Abbas Abdulsalam

Examiner

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July, 30, 2003